

# Early names and records of two small *Hieraaetus* eagles (Aves: Accipitridae) in the Cape Province of South Africa

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## ABSTRACT

Names and records of Ayres's Hawkeagle and the Booted Eagle, chiefly in the Cape Province of South Africa are discussed. *Morphinus dubius* Smith was said by Roberts to be the first name applied to Ayres's Hawkeagle and as a result the species is universally called either *Hieraaetus dubius* or *Aquila dubia*. Smith's type may not have survived but his description lacks reference to any character diagnostic of Ayres's Hawkeagle whereas it is a straightforward description of a pale phase Booted Eagle *H. pennatus*. Thus *M. dubius* is a junior synonym of *H. pennatus* and the first available name for Ayres's Hawkeagle is *Spizaetus ayresii* Gurney. The type locality of *M. dubius* is in the Vredendal District of the western Cape hundreds of kilometres from the woodlands and forests which *H. ayresii* frequents. There is no satisfactory evidence for the occurrence of *H. ayresii* in the western Cape and all records are rejected. In the eastern Cape some records are acceptable but all are of wandering immature birds. The most southerly record of an adult is from the northern Transkei. Most misidentifications are of *H. pennatus* which is now known to be relatively common in the Cape Province. A Zambezi valley record of *H. ayresii* is validated.

## WHAT IS MORPHINUS DUBIUS?

The name *Morphinus dubius* Smith (1830a) (full citations of names will be found in Appendix 1) lay unused for over 100 years because it was believed to be indeterminate. Roberts (1936: 321) argued that *M. dubius* was the first description of Ayres's Hawkeagle *Spizaetus ayresii* Gurney (1862). There has been no further discussion of Roberts's view but it has been universally accepted and for over 40 years Ayres's Hawkeagle has been referred to as *Hieraaetus dubius* or *Aquila dubia* according to taxonomic taste.

Smith (1830a) used the generic name *Morphinus* and attributed it (p. 115) to Cuvier. In Smith (1834) he corrected the name to *Morphnus* (p. 276) still attributing it to Cuvier. As Friedmann (1950: 421) makes clear, *Morphinus* is an unjustified emendation by Fleming in 1822 of Dumont's, 1816, *Morphnus* which Dumont attributed to Cuvier, presumably in MS.

In the course of C.J.V.'s investigations into the past and present distribution of eagles in the Cape Province it has emerged that Ayres's Hawkeagle is a rare vagrant and that several of the claimed records are unacceptable. A critical reading of Smith (1830a) does not permit agreement with Roberts's (1936) findings on *M. dubius*. There are no characters in the description which apply it unequivocally to Ayres's Hawkeagle: it lacks any reference to an occipital crest, an evenly barred tail or ginger coloured underparts, the three plumage characters that separate juvenile Ayres's Hawkeagle from the similarly sized Booted Eagle *H. pennatus* (Gmelin) 1788.

Smith's (1830a) text is a good description of a pale phase *H. pennatus* "plumage above . . . the shafts of the feathers and a portion of the vanes adjoining being always darkest; . . . chin, throat, and centre of breast chiefly white, with some brown shades in the form of longitudinal streaks that include the shafts of the feathers; belly white, here and there variegated with clouds of light reddish-brown or with dark brown narrow streaks, produced by the shafts being that colour. Several of the long feathers on the flanks more or less distinctly crossed with reddish-brown, and those on the outside of the thighs also slightly marked in the same way, only with a lighter shade, the rest of the feathers of the legs pure white . . . insides of shoulders *white*, with a few blackish-brown spots or blotches. Tail nearly *even*, the feathers blackish-brown, variegated with *narrow waved irregular bands* of a darker tint," (italics added).

The type of *M. dubius* may not have survived and this is true of several of the types of animals described by Andrew Smith while still in South Africa. However, Smith (1834) synonymized his *M. dubius* with his newly proposed *Butaetes lessonii* of which the type survives in the British Museum (Natural History) under reg. no. 43.2.28.64. The register, but not the label, states that the specimen is *Buteo (sic) lessonii* and the entry lies among a batch of Andrew Smith's types registered at the same time (C. W. Benson in litt. 1978 to R.K.B.). The specimen is, as the description would lead one to expect and did lead Hartert (1914) to find, an undoubted pale phase *H. pennatus*. This view of what is meant by *M. dubius* is supported by Smith's (1834) revision coupled with the identity of the surviving second type.

The view taken of the relationship between *M. dubius* and *B. lessonii* in the preceding paragraph is not the only possible one in the light of known taxonomic practice in the early XIX century. It is quite possible, indeed very likely, that Smith regarded *B. lessonii* as a redescription of *M. dubius* in a more appropriate genus and with a less inappropriate specific epithet. This is borne out by the fact that the description of *B. lessonii* is a shortened version of that of *M. dubius* and does not differ from it positively in any respect. If this suggestion is truly the case, then specimen no. BM(NH) 43.2.28.64 is the type not only of *B. lessonii* as argued above but also of *M. dubius*. This suggestion could be disproved by critically comparing the specimen with the description of *M. dubius*.

#### CONSEQUENCES OF FINDING

What follows from this finding? In the first place, as set out in Appendix 1, the name *dubius* of Smith cannot be applied to Ayres's Hawkeagle and workers must revert to calling the species *ayresii* of Gurney in whatever generic combination seems warranted: preferably *Hieraetus ayresii*, cf. Brooke (1974). Smith's *M. dubius* must be placed in and *Butaetes lessonii* must be restored to the synonymy of *H. pennatus* (Gmelin) as Hartert (1914) held and contra Brooke (1974). If the South African breeding population of *H. pennatus* proves taxonomically separable from west Palaearctic breeding populations (this does not seem likely to be the case), *M. dubius* is the first name applied to South African birds and would form their subspecific epithet. Heerenlogement, the type locality of *M. dubius*, must be restored to the list of localities in the Cape Province at which *H. pennatus* has been collected since its rejection by Brooke (1974) has been shown to be unwarranted. Likewise, the sight and breeding records at Franschoek and east of Klaver made in 1917 by Roberts (1936: 322) attributed to

*H. ayresii* must be transferred to *H. pennatus* which is now known to be a widespread breeding species in the Cape Province south of the Orange River (Brooke *et al.* 1980).

#### OTHER RECORDS REVIEWED

*Morphinus albescens* Smith (1830a) was transferred by Brooke (1974) to the synonymy of *Spizaetus coronatus* (L.), 1766, from that of *H. pennatus* where Hartert (1914) had provisionally placed it. In his 1834 revision Smith admitted *S. coronatus sub nom. Aquila coronata* to the South African avifauna (p. 273) but did not realise that his *M. albescens* was only its juvenile. Roberts (1936: 294) seems to have made a reciprocal error in dealing with Smith's MS entry under *M. ornatus*. Roberts did not publish the lengthy descriptions that Smith wrote so it is not practicable to check what Smith was describing; one may accept Roberts's view that they apply to *S. coronatus*. Nonetheless, the notes that Roberts (1936) did publish, including the reference to a specimen shot at the Heerenlogementsberg in January 1829, only make sense when applied to *H. pennatus*. Smith's bird had a "Bill towards cere bluish . . . cere and feet a sort of greenish yellow" whereas *S. coronatus* has a black bill with dark cere. The habitat is an arid scrubcovered mountain rising out of a semidesert plain which is appropriate for *H. pennatus* (Brooke *et al.* 1980) but not for *H. ayresii* and *S. coronatus* which are eagles of forest and woodland. And Smith (Roberts 1936) said his species was "very common".

Roberts (1936: 322) mentions a specimen of *H. ayresii* which he examined in the South African Museum, Cape Town. R.K.B. has recently re-examined it and it is an undoubted *H. ayresii* as Roberts said. It is a small adult male with hardly any markings on the underparts. The label, written in the last century, says "Cape District—purchased" and there is no information given on who collected it or sold it to the museum. The unsatisfactory wording of the label is not proof that *H. ayresii* has occurred in the western Cape (west of 25°E and south of 29°S) in recorded history in the absence of any other records which might be called analogously in its support.

In addition to the adult male specimen of uncertain provenance just discussed there are three or four specimen records of *H. ayresii* from the eastern Cape which are acceptable. The earliest was collected c. 1820 by Mundt and Le Maire, two Prussian botanists (ffolliott & Liversidge 1971), somewhere on the Sundays River: it is a juvenile female in the Humboldt Museum, Berlin (Stresemann 1924). There is an unsexed juvenile from Grahamstown taken in 1910 in the Albany Museum, Grahamstown, which is also mentioned by Finch-Davies (1919) and another unsexed juvenile without date in the East London Museum merely labelled "eastern Cape Province". The label, at least, must have been written in or after 1910 when the Cape Colony became the Cape Province. This is probably not the juvenile female from near Port Elizabeth mentioned by Finch-Davies (1919).

Layard (1867) placed the Buse Gantée of Levaillant (1796) in the synonymy of *H. pennatus*. This is clearly incorrect. Smith (1830b) pointed out that European workers had placed it as a synonym of the Roughlegged Buzzard *Buteo lagopus* (Pontoppidan, 1763, *Danske Atlas* p. 616: Denmark) which is clearly the species of the picture and much of the description. But the species does not occur in the Cape Province: the most southerly recorded localities in Vaurie (1965) are Cyprus and Malta. What was the specific identity of the Outeniqua forests specimen, shot by Levaillant, which was so like *B. lagopus* that he failed to distinguish it? After discussion between R.K.B. and Dr L. H. Brown it seems nearly certain that the specimen was a subadult *H. ayresii*. Living solitarily in forested country is appropriate and so are the heavily blotched tarsal feathers reaching to the toes with their long thin, "plus effilées", claws. R. Martin (pers. comm. to R.K.B.) who has a good knowledge of the forested country of George and Knysna, the Outeniqua forests of early writers, has never seen *H. pennatus* there despite search. And it would seem less easy to muddle the European *H. pennatus* with *B. lagopus* than



the then unknown *H. ayresii* in immature plumage. Thus Levillant's Buse Gantée is almost certainly the first record of a vagrant immature *H. ayresii* in the eastern Cape.

Skead (1967) gives three other records of *H. ayresii* from the eastern Cape. Those from Golden Valley and King Williams Town in 1966 have been re-examined and they prove to be specimens of *H. pennatus*. The 1962 record from King Williams Town is a MS sight record by G. Ranger and C. J. Skead at Kei Road on 7 April 1962 of a juvenile *H. ayresii* described as having an "unmistakable crest". This record seems acceptable, not least because of the lengthy field experience of both observers. It will be noted that all indubitable records from the Cape Province (not the extralimital Transkei) are of juvenile or immature birds. The only adults are the South African Museum specimen whose provenance is uncertain and one which was shot in Pondoland, Transkei, in February 1909 but which was not preserved (Finch-Davies 1919).

*H. ayresii* was recorded by Winterbottom (1971: 60) from Goodhouse on the Orange River where it forms the frontier between the Cape Province and Namibia but the source of this record is not known (Dr J. M. Winterbottom pers. comm. to R.K.B.). In the absence of supporting details this record of a forest and woodland eagle in the desert is unacceptable and *H. ayresii* should not be admitted to the Namibian list on the strength of this record.

Sclater (1905) and Stoehr & Sclater (1906: 109) recorded the collection of *H. spilogaster* on 25 February 1904 from George's Ferry at 15° 40'S, 30° 18'E on the Zambian bank of the Zambezi (Benson *et al.* 1970: 55) a few kilometres upstream from Feira at the junction of the Luangwa and Zambezi Rivers. Finch-Davies (1919) redetermined this specimen as *H. ayresii* and even provided a coloured portrait of it to illustrate his paper. This redetermination was overlooked by Benson *et al.* (1971) who stated that *H. ayresii* had not yet been recorded in the Zambezi and Luangwa valleys. The specimen has been demounted but is still preserved in the South African Museum where R.K.B. has recently examined it and found it to be, as Finch-Davies (1919) said, an adult female *H. ayresii*.

As a result of the foregoing findings Map 101 for *H. ayresii* in Snow (1978) needs to be amended by the deletion of the four symbols in the western Cape and by the addition of one at the Luangwa/Zambezi confluence.

Brooke (1974) was written before he had seen the South African Museum material of *H. pennatus*. Table 1 may be regarded as a continuation of Table 1 in Brooke (1974) in that it provides analogous data on the South African Museum specimens. The Wynberg specimen which was formerly mounted was collected by Dr H. Exton, cf. Winterbottom (1955).

TABLE 1

*Data on specimens of Hieraaetus pennatus pennatus examined in the South African Museum, Cape Town. All measurements in mm.*

Date	Place	Sex	Age	Wing length	Culmen length	Hind Claw length	Phase
c. 1870	Wynberg, C.P.	♂	ad.	350	19,8	20,7	dark
c. 1880	—	♂	ad.	355	21,5	22,5	pale
c. 1900	—	♀	imm.	385	22,3	26,2	pale
4.10.1910	Robertson, C.P.	♀	imm.	370	21+	26,2	pale
24.11.1910	Lynedoch, C.P.	♂	ad.	360	20,5	22,0	pale

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